

Letters to the Editor

Liver in mythology: A different version of Tityos' myth

To the Editor:

In the original and enjoyable article by Riva and co-workers [1], the author cites an issue by Tiniakos *et al.* [2] about the giant Tityos receiving the same punishment suffered by Prometheus. The only difference consisted in the kind of bird involved: Zeus' eagle in Prometheus myth, a vulture in Tityos' one.

Tityos too... was to be seen (in Tartarus); his body pegged over a full nine acres, a huge vulture with hooked beak gnawing forever his inexhaustible liver... (rostroque immanis vulture obunco immortale iecur tondens fecundaque poenis) [3].

As is usually the case in mythology, Tityos' myth also has different versions.

In one of them, Tityos, one of Gea's sons, was a giant. Instigated by Hera, he made an assault upon Leto, Artemis and Apollo's mother, but was hit by the arrows of Apollo or, according to others, he was struck by Zeus' lightning.

Tityos, however, was immortal, but was punished by Zeus who had him bound in Tartarus, where two vultures fed on his liver which, as in Prometheus legend, kept regenerating.

*And I saw Tityus, son of glorious Earth,
lying on the ground. His body covered
nine acres and more. Two vultures sat there,
one on either side, ripping his liver,
their beaks jabbing deep inside his guts* [4].

Homer says that a vulture preyed daily on Tityos' self-renewing liver. This is quite a strange, and not trivial, point, since vultures are scavengers. Vultures would never eat living animals. Interestingly, in Hyginus' *fabula* the vulture is replaced by a snake [5].

"Because Latona (Leto) had lain with Jove, Juno ordered Tityos, a creature of immense size, to offer violence to her. When he tried to do this he was slain by the thunderbolt of Jove [Zeus]. He is said to lie stretched out over nine acres in the Land of the Dead, and a serpent is put near him to eat out his liver, which grows again with the moon".

Despite the major authority of Homer, Hyginus' version is preferable because snakes 'fit better' with liver.

Snakes and the liver both have oracular implications ('liver divination' = using the liver to predict the future). Both were deemed to embody the power of life. Both were believed to be immortal. Snakes, especially, were considered immortal because they were believed to renew themselves by shedding old skin.

In addition, Tityos and Python, the most famous Hellenic snake, are related mythological figures. They were both killed by Apollo almost at the same time.

"Apollo... destroyed Tityos, a violent and lawless man who ruled there; and that the Parnassians joined him and informed him of another cruel man named Python and known as the Drakon (Dragon)" [6].

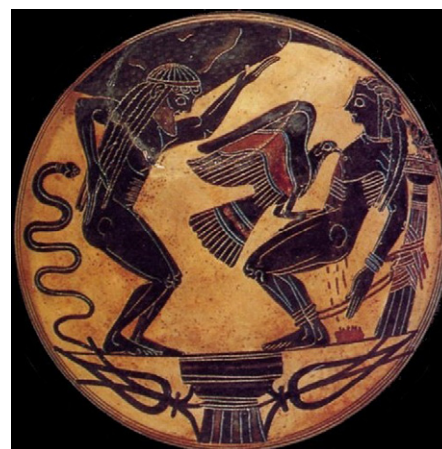


Fig. 1. Laconic kylix from Cerveteri, about 6th century BC (Vatican Museums). A giant, on the left, is assailed by a snake, and we can clearly see that the right side of his abdomen is wounded.

Leto was pursued by Python. Leto then gave birth to Apollo, who slew Python [7].

And again:

Python,... was a huge draco who, before the time of Apollo, use to give oracular responses... Death was fated to come him from semen of Latona (Leto)... When Python knew that Latona was pregnant he followed her to kill her... Four days after they was born, Apollo... slew Python with his arrows [8].

Moreover, Python was a snake. Tityos is always described in literature in human shape, and is so represented in ancient art. But in Gigantomachy, on the Eastern frieze of the great Altar of Zeus in Pergamon, the giant who opposes Leto, identified with Tityos, has a curious characteristic: a snake grows out of his back and seems to represent a tail in serpent shape. It is quite significant that Tityos, a giant, is sometimes associated with Python. Giant and dragon interchange as opponents either of gods or heroes in ancient myths, and in Gigantomachies we have evidence of their near-identity.

Therefore it is not surprising to find in Tartarus a snake (Python), a chthonic oracle, "inspecting" (eating) the liver of Tityos (a chthonic giant).

And, as already mentioned, liver and snake have in common the fact to be sources of divination.

In her issue, Tiniakos says that "myths and tradition, literature and fine arts... can provide valuable information on medical knowledge in the ancient ages, sometimes more useful than the writings of ancient physicians". An example is the magnificent Laconic ceramic shown in Fig. 1.

Conflict of interest

The authors declared that they do not have anything to disclose regarding funding or conflict of interest with respect to this manuscript.

References

- [1] Riva MA, Riva E, Spicci M, Strazzabosco M, Giovannini M, Cesana G. "The city of hepar": rituals, gastronomy, and politics at the origins of the modern name for the liver. *J Hepatol* 2011;55:1132–1133.
- [2] Tiniakos DG, Kandilis A, Geller SA. Tityus: a forgotten myth of liver regeneration. *J Hepatol* 2010;53:357–361.
- [3] Virgilius, Aeneides 6595–6597.
- [4] Homer, *Odyssey* 11, 576.
- [5] Hyginus, *Fabulae*, 55.
- [6] Strabo, *Geography* 9. 3. 12.
- [7] Ovid, *Metamorphosis*, VI, 370.
- [8] Pseudo-Hyginus, *Fabulae* 140.

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Reply to "Liver in mythology: A different version of Tityos' myth"

Liver, snakes and myths

To the Editor:

I greatly appreciate the letter written by Luigi Roffi, providing us with further information on the less-known myth of the Giant Tityus, cited in our manuscript [1] and in the paper by Tiniakos *et al.* [2]. As mentioned by Roffi, in ancient populations snakes played an important role in the divination practice since they were supposed to be able to predict the future [3]. The relationship between the liver and snakes seems to be well clarified. These animals were believed to regenerate themselves when they shed skin, revealing a shiny new skin underneath. So, as suggested in the letter, snakes appear to be involved in myths of "regeneration", as the liver of Prometheus and Tityus. This is one of the reasons why these animals were looked upon as sacred to Asclepius, the Greek god of medicine, who carried a serpent-entwined rod. This symbol, named as "the rod of Asclepius" has continued to be used in modern times, being universally associated with medicine and healthcare [3].

Actually more precise information is needed on the Laconic bowl shown in Fig. 1 of the letter. Contrary to what stated in the legend, it does not reproduce the Giant Tityus, but the punishments of Prometheus (on the right) and of his brother Atlas (on the left), bearing the sky on his shoulders [4]. In particular, this picture seems to refer to the "Theogony" by Hesiod: "And Atlas through hard constraint upholds the wide heaven with unwearied head and arms, standing at the borders of the Earth before the clear-voiced Hesperides; for this lot wise Zeus assigned to him. And ready-witted Prometheus he [Zeus] bound with inextricable bonds, cruel chains, and drove a shaft through his middle, and set on him a long-winged eagle, which used to eat his immortal liver; but by night the liver grew as much again everyway as the long-winged bird devoured in the whole day" (*Theogony*, 517–525). According to the myth, Atlas lived near

the "Garden of the Hesperides" in the Western Mediterranean [4] and, so, the snake reproduced beside him should represent Ladon, the serpent-like dragon which guarded the golden apples in the garden. In addition, since Prometheus was chained to the Caucasus Mountains situated between the Black and the Caspian Sea, this picture reproduces the geographic limits (mount Atlas and Caucasus) of the world of the ancient Greeks and Etruscans.

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References

- [1] Riva MA, Riva E, Spicci M, Strazzabosco M, Giovannini M, Cesana G. "The city of hepar": rituals, gastronomy, and politics at the origins of the modern name for the liver. *J Hepatol* 2011;55:1132–1133.
- [2] Tiniakos DG, Kandilis A, Geller SA. Tityus: a forgotten myth of liver regeneration. *J Hepatol* 2010;53:357–361.
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